

What is claimed is:

1. A packet communication system performing packet communication in which incoming and outgoing calls are controlled at call control means and user data is encapsulated
5 and decapsulated at user data processing means, comprising:
resource management means for managing resources of the user data processing means, the resource management means being provided in the user data processing means.
2. The packet communication system according to claim 1,
10 wherein the resource management means manages at least an available resource ratio indicating a ratio of remaining bands and the number of remaining sessions relative to band resources and the number-of-sessions resources of the user data processing means.
- 15 3. The packet communication system according to claim 2, wherein the call control means comprises storage means for storing the available resource ratio of the user data processing means that is notified from the resource management means.
- 20 4. The packet communication system according to claim 2, wherein the user data processing means attaches the available resource ratio to a response signal for the call control means and then sends the resulting response signal to the call control means.

5. The packet communication system according to claim 4,
wherein the user data processing means attaches the available
resource ratio to a response message for a call setup request
sent from the call control means in order to establish a session,
5 and then sends the resulting response message to the call
control means.

6. The packet communication system according to claim 4,
wherein the user data processing means attaches the available
resource ratio to a response message for a call release request
10 sent from the call control means in order to release the session,
and then sends the resulting response message to the call
control means.

7. The packet communication system according to claim 4,
wherein the user data processing means attaches the available
15 resource ratio to a response message for a health check signal
sent from the call control means in order to check a condition
of the user data processing means, and then sends the resulting
response message to the call control means.

8. The packet communication system according to claim 2,
20 wherein the call control means selects the user data processing
means having remaining resources in accordance with the
available resource ratio, and sends the call setup request for
establishment of the session to the selected user data
processing means.

9. A network device performing packet communication by controlling incoming and outgoing calls at call control means and by encapsulating and decapsulating user data at user data processing means, comprising:

5 resource management means for managing resources of the user data processing means, the resource management means being provided in the user data processing means.

10. The network device according to claim 9, the resource management means manages at least an available resource ratio
10 indicating a ratio of remaining bands and the number of remaining sessions relative to band resources and the number-of-sessions resources of the user data processing means.

11. The network device according to claim 9, wherein the call
15 control means comprises storage means for storing the available resource ratio of the user data processing means that is notified from the resource management means.

12. The network device according to claim 10, wherein the user data processing means attaches the available resource ratio
20 to a response signal for the call control means and then sends the resulting response signal to the call control means.

13. The network device according to claim 12, wherein the user data processing means attaches the available resource ratio to a response message for a call setup request sent from the

call control means in order to establish a session, and then sends the resulting response message to the call control means.

14. The network device according to claim 12, wherein the user data processing means attaches the available resource ratio
5 to a response message for a call release request sent from the call control means in order to release the session, and then sends the resulting response message to the call control means.

15. The network device according to claim 12, wherein the user data processing means attaches the available resource ratio
10 to a response message for a health check signal sent from the call control means in order to check a condition of the user data processing means, and then sends the resulting response message to the call control means.

16. The network device according to claim 10, wherein the call
15 control means selects the user data processing means having remaining resources in accordance with the available resource ratio, and transmits the call setup request for establishment of the session to the selected user data processing means.

17. A method of managing resources for a network device
20 performing packet communication by controlling incoming and outgoing calls at call control means and by encapsulating and decapsulating user data at user data processing means, wherein
the user data processing means executes a step of managing resources of the user data processing means.

18. The method of managing resources according to claim 17,
wherein the step of managing resources includes managing at
least an available resource ratio indicating a ratio of
remaining bands and the number of remaining sessions relative
5 to band resources and the number-of-sessions resources of the
user data processing means.

19. The method of managing resources according to claim 18,
wherein the call control means executes a step of storing in
storage means thereof the available resource ratio of the user
10 data processing means that is notified by the step of managing
resources.

20. The method of managing resources according to claim 18,
wherein the user data processing means attaches the available
resource ratio to a response signal for the call control means
15 and then sends the resulting response signal to the call
control means.

21. The method of managing resources according to claim 20,
wherein the user data processing means attaches the available
resource ratio to a response message for a call setup request
20 sent from the call control means in order to establish a session,
and then sends the resulting response message to the call
control means.

22. The method of managing resources according to claim 20,
wherein the user data processing means attaches the available

resource ratio to a response message for a call release request sent from the call control means in order to release the session, and then sends the resulting response message to the call control means.

5 23. The method of managing resources according to claim 20, wherein the user data processing means attaches the available resource ratio to a response message for a health check signal sent from the call control means in order to check a condition of the user data processing means, and then sends the resulting
10 response message to the call control means.

24. The method of managing resources according to claim 18, wherein the call control means selects the user data processing means having remaining resources in accordance with the available resource ratio, and transmits the call setup request
15 for establishment of the session to the selected user data processing means.